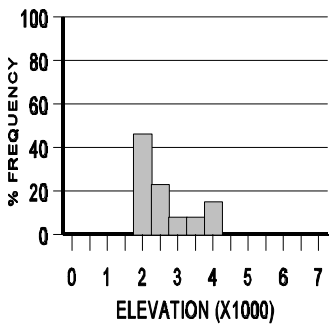
PSME 22

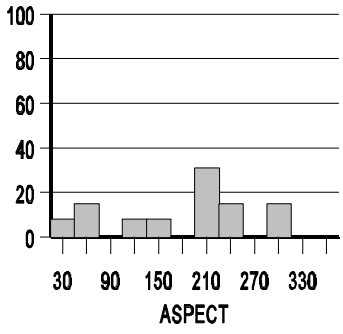
DOUGLAS-FIR-INCENSE-CEDAR
Pseudotsuga menziesii/Calocedrus decurrens
PSME-CADE27 (N=13; BLM=13)

Distribution. This Association is scattered east of the Coast Range crest on dry sites. It occurs on the Grants Pass and Glendale Resource Areas, Medford District, Bureau of Land Management, and on the Galice and Illinois Valley Ranger Districts, Siskiyou National Forest.

Distinguishing Characteristics. This Association is not likely to occur in the Cascades or west of the Coast Range crest. It is highly associated with, but not exclusively found on, ultramafic parent material. Soils are usually shallow and rocky. Jeffrey pine and rock fern, highly reliable indicators of ultramafics, are important key species for distinguishing this Association from others in the Series.

Soils. Parent material is generally ultramafic, mostly serpentine, or metavolcanic material. Based on 13 samples, soil depth averages at least 16 inches. Textures





are mostly silty clay loam, silt loam, or clay loam. Average rock fragment content is 36 percent. Most fragments (24 percent) are of gravel size.

Environment. Elevation ranges from about 2000 to over 4000 feet. The average is 2700 feet and frequency lessens at higher elevations. The mode, however, at only 2000 feet, indicates the distribution is not normal. This Association occurs on all aspects, but most often faces south. Douglas-fir-Incense-cedar occurs from midslopes to ridgetops, but rarely occupies bottomland positions. Slopes average about 45 percent. Average annual temperature is about 48 degrees F and average annual precipitation is about 53 inches. Approximately 2 percent of the forest floor is exposed bedrock, 50 percent is covered with litter, 6 percent is bare ground, and 8 percent is covered with moss.

Vegetation Composition and Structure. Total species richness, very low for the Series, is 20. The shrub layer, particularly depauperate, averages only three species. Cover greater than 10 feet (3 meters) tall, usually trees, averages 58 percent. Tree cover less than 10 feet tall averages 7 percent. Tall shrubs, greater than 20 inches (50 centimeters) tall, average 10 percent cover; low shrubs, less than 20 inches tall, average 7 percent cover. Herb cover averages 44 percent, high for drier sites of the Series. Jeffrey pine is a prominent species in both the overstory and understory. Together with rock fern, Jeffrey pine is almost a sure indication of ultramafic soils. Incense-cedar tolerates ultramafics well, but it also tolerates every other parent material type. Canyon live oak and the lack of shrubs and herbs are likely an indication of both a dry environment and the nutrient imbalance associated with ultramafics. Grasses survive and grow well on most imbalanced sites. Fescue is commonly found associated with ultramafic parent material.

Common name	Code	Constancy	Cover	Avg. Richness
Overstory trees				2
Jeffrey pine	PIJE	62	24	
Incense-cedar	CADE27	46	23	
Douglas-fir	PSME	46	23	
Understory trees				4
Incense-cedar	CADE27	92	14	
Douglas-fir	PSME	77	13	
Jeffrey pine	PIJE	56	7	
Canyon live oak	QUCH2	23	11	
Pacific madrone	ARME	23	10	
Shrubs				3
Wedgeleaf ceanothus	CECU	23	19	
Herbs				12
Rock fern	ASDE6	54	1	
Fescue	FESTU	38	35	
Western sword-fern	POMU	31	25	